

**Abstract****High Rate Receiver**

The present invention relates to wireless burst communications receivers especially for high-rate indoor applications. The present invention provides

5 a phase lock loop (PLL) circuit for receiving a burst signal including a repeated preamble sequence and a data sequence, the circuit comprising a maximum likelihood sequence estimator (MLSE) and means for determining the phase difference between a signal at the output of the MLSE and a corresponding delayed signal at the input of the MLSE, phase rotating means  
10 for rotating the phase of said burst signal dependent on said phase difference, the output of said means being coupled to the MLSE input, wherein the phase determining means is further arranged to determine the phase difference between a non-delayed signal at the MLSE input and a stored preamble sequence signal.

15 [Fig. 3]